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Course Description

In Physical Science, you will investigate Physics and Chemistry concepts through experience in laboratories and fieldwork using the processes of inquiry. Emphasis is based on developing skills such as observing, inferring, data collecting, and graphing. Students in this course will be required to take a Georgia Milestones exam in the spring.

Course Content

Physical science is a class that is designed to integrate major concepts in Physics and Chemistry. Both sciences are very challenging and involve an inquiry based learning, problem solving, data interpretation, scientific reasoning and writing skills.

Course outline

First Semester - Intro to Physics

Representing Motion
Accelerated Motion
Forces
Work
Power
Energy
Waves
Electricity
Magnetism

Second Semester - Intro to Chemistry

Properties of Matter
Scientific Measurement
Atomic Structure
Electrons
Periodic Table
Ionic Bonds
Covalent Bonds
Chemical Reactions
Acids and Bases and Solutions

Standards for Physical Science:

- SPS1. Obtain, evaluate, and communicate information from the Periodic Table to explain the relative properties of elements based on patterns of atomic structure.
- SPS2. Obtain, evaluate, and communicate information to explain how atoms bond to form stable compounds.
- SPS3. Obtain, evaluate, and communicate information to support the Law of Conservation of Matter.
- SPS4. Obtain, evaluate, and communicate information to explain the changes in nuclear structure as a result of fission, fusion and radioactive decay.
- SPS5. Obtain, evaluate, and communicate information to compare and contrast the phases of matter as they relate to atomic and molecular motion.
- SPS6. Obtain, evaluate, and communicate information to explain the properties of solutions.

SPS7. Obtain, evaluate, and communicate information to explain transformations and flow of energy within a system.

SPS8. Obtain, evaluate, and communicate information to explain the relationships among force, mass, and motion.

SPS9. Obtain, evaluate, and communicate information to explain the properties of waves.

SPS10. Obtain, evaluate, and communicate information to explain the properties of and relationships between electricity and magnetism.

The Physical science standards of excellence are found at

<https://www.georgiastandards.org/Georgia-Standards/Documents/Science-Physical-Science-Georgia-Standards.pdf>

Materials Needed:

| | | |
|----------------|-------------------------|--------------------------|
| Notebook paper | Pocket folder-1 | Three inch ring binder |
| Pencils | Construction paper | Color pencils / Markers |
| Pens | Basic Calculator | Positive attitude |
| Glue sticks | Transparent tape | Scissors |

School-wide Grading Requirements as follows (year-long grading):

Semester Final Average:

Final exam or EOC/Milestone Assessment- 9th- 12th grade level courses- 20%

Course Final Average- all 9th- 12th grade courses- 80%

Formative assessment:

Practice (i.e., classwork/homework)- 20%

Summative assessment: Quizzes/labs- 35%

Major tests/projects- 45%

Note: *the Formative and Summative Assessments equal 100% but fall under the category of Course Final Average which is 80% of the Course Final Average.

Course Final Average- Year-long Average (80%) and Final Exam/EOC Milestone (20%)

*Grades for each 9 week grading period should include a minimum of the following: 3 tests in the summative assessment/Test category, 3 labs/quizzes in Lab/Quiz category and 9 Practice grades.

Academic Integrity Policy:

Academic integrity is a fundamental value of quality education; therefore, Woodland High School will not tolerate any acts of cheating, plagiarism, or falsification of school work. Should it be determined that an academic integrity violation has taken place, the school reserves the right to assign a grade of a zero and submit a disciplinary referral to the appropriate Assistant Principal. The school also reserves the right to remove or suspend enrollment in any Advanced Placement/Honors classes as well as Academic Honor Societies.

All tests administered during the school year are based on the standards aligned by the GA department of education. As a department, we work very hard to maintain the security of our

tests. Quality assessments take a great deal of effort to create them. Students are given the opportunity to go over the questions missed in class and clarify information in the class. Remediation, review and retest will be offered after school till 3.45 pm. The students cannot have their cell phones and book bags with them during testing. **20 points** will be removed for any assignment which does not have the “Name of the student”, class period and date.

Resource for Physical science

Please check on the following resources for the EOC milestones testing.
Physical Science EOC Study/Resource Guide: http://www.gadoe.org/Curriculum-Instruction-and-Assessment/Assessment/Documents/Milestones/Study-Resource%20Guides/StudyGuide_PSC_s15GA-EOC_08.14.15.pdf

Text Book

Physical science: Concepts in action, Prentice Hall Replacement cost \$83.14

Technology Information:

Students are free to use technology for instructional purposes ONLY! Any device being used for purposes that are not educational or beneficial to the learning process will be confiscated.

Laboratory Safety:

A separate Lab Safety Contract will be given to each student. It should be reviewed and signed by both the student and parent and returned before the student can participate in lab. No eating or drinking in the classroom and also during lab work.

Make-up work Policies:

Unexcused absences will result in no grades awarded for the work given while absent. Excused absences allow the students to make up the work in the equal amount of time they were absent.

Late Work Policies:

Any assignment categorized as a formative assessment will be accepted late with a 10% deduction for each day that it is late. After 3 days it will only be accepted for half credit. Any major projects unless otherwise notified will be accepted late with a 10% deduction for each day that it is late. Late work of any kind will not be accepted for a unit once that unit is complete.

Tutoring:

Tutoring will be offered till 3.45 pm with prior appointment by the student. It is recommended that a student should take advantage of tutoring if there are missing assignments or a grade lower than a 69% or to retest.

Please make an appointment if your desire to come for tutoring after school.

Classroom Rules and Discipline Procedures:

To ensure an optimum learning environment, please adhere to the following:

- Students will be respectful to all adults and classmates.
- Students will be seated in class when the bell rings.
- Students will not display cell phones, portable electronic devices or unauthorized materials in class unless directed by a teacher to do so.
- Students will use computers/technology appropriately at all times.
- Students will use the time given between classes to use the bathroom (they will not be allowed to use the bathroom 20 minutes after or before the bells ring for class dismissal.)
- NO CELL PHONES

The 4 step protocol will be enforced if the Classroom expectations are not followed. A major offense by any student will result in an immediate referral to the office.

Class Work:

All work should be completed in class. Your class work grade will also be based on

*Your willingness to work well with others *complete assignments *participate in class discussions.

Homework/Projects:

- All homework must be turned in on time
- Projects should follow the rubric given
- Papers will be handed back to you and feedback will be given

I expect you to:

- ✓ Come prepared with your materials to learn
- ✓ Complete the homework and classwork assignments on time
- ✓ Review the lessons taught
- ✓ Pay attention and follow directions
- ✓ Stay on task.
- ✓ Connect ideas and ask questions
- ✓ Stay positive and constructive.
- ✓ Always participate in class discussions
- ✓ Stay calm and focus on instruction
- ✓ Work from bell to bell
- ✓ Respect of the rights and property of others
- ✓ Respect the right of each student to learn
- ✓ Appreciate others with dignity and respect
- ✓ Use the restroom before or after the class

Again, Welcome to my class and let us have a great year!